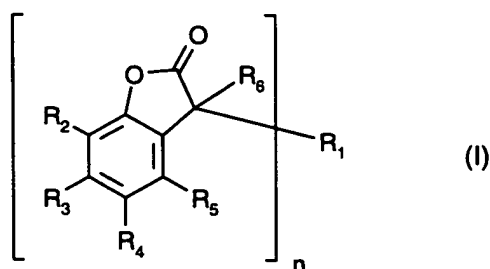


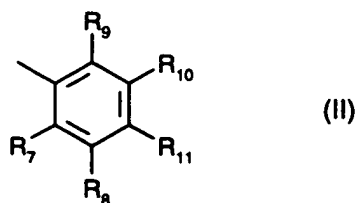
WHAT IS CLAIMED IS:

1. A powder coating composition comprising
 - a) an organic film-forming binder and
 - b) as stabilizer at least one compound of the benzofuran-2-one type.
2. A powder coating composition according to claim 1, in which component (b) is a compound of the formula I



in which, if n is 1,

R₁ is unsubstituted or C₁-C₄alkyl-, C₁-C₄alkoxy-, C₁-C₄alkylthio-, hydroxyl-, halogen-, amino-, C₁-C₄alkylamino-, phenylamino- or di(C₁-C₄alkyl)amino-substituted naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thienyl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxathiinyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazinyl, indolizynyl, isoindolyl, indolyl, indazolyl, purinyl, quinolizynyl, isoquinolyl, quinolyl, phthalazinyl, naphthyridinyl, quinoxalinyl, quinazolinyl, cinnolynyl, pteridinyl, carbazolyl, β-carbolinyl, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl, biphenyl, terphenyl, fluorenyl or phenoxazinyl, or R₁ is a radical of the formula II



and,

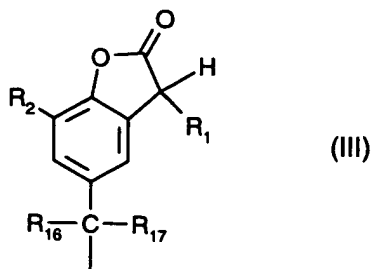
if n is 2,

R_1 is unsubstituted or C_1 - C_4 alkyl- or hydroxyl-substituted phenylene or naphthylene; or is $-R_{12}-X-R_{13}-$,

R_2 , R_3 , R_4 and R_5 independently of one another are hydrogen, chlorine, hydroxyl, C_1 - C_{25} -alkyl, C_7 - C_9 phenylalkyl, unsubstituted or C_1 - C_4 alkyl-substituted phenyl; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkyl; C_1 - C_{18} alkoxy, C_1 - C_{18} alkylthio, C_1 - C_4 alkylamino, di(C_1 - C_4 -alkyl)amino, C_1 - C_{25} alkanoyloxy, C_1 - C_{25} alkanoylamino, C_3 - C_{25} alkenoyloxy, C_3 - C_{25} -

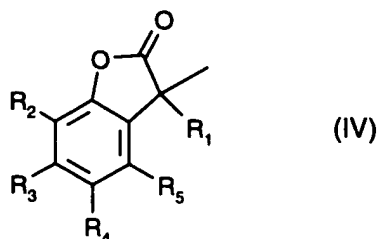
alkanoyloxy interrupted by oxygen, sulfur or $\text{>N}-R_{14}$; C_6 - C_9 cycloalkylcarbonyloxy,

benzoyloxy or C_1 - C_{12} alkyl-substituted benzoyloxy; or else the radicals R_2 and R_3 or the radicals R_3 and R_4 or the radicals R_4 and R_5 , together with the carbon atoms to which they are attached, form a benzo ring, R_4 is additionally $-(CH_2)_p-COR_{15}$ or $-(CH_2)_qOH$ or, if R_3 , R_5 and R_6 are hydrogen, R_4 is additionally a radical of the formula III



in which R_1 is as defined above for $n = 1$,

R_6 is hydrogen or a radical of the formula IV



where R_4 is not a radical of the formula III and R_1 is as defined above for $n = 1$,

R_7 , R_8 , R_9 , R_{10} and R_{11} independently of one another are hydrogen, halogen, hydroxyl,

C_1 - C_{25} alkyl, C_2 - C_{25} alkyl interrupted by oxygen, sulfur or $\text{>N}-R_{14}$; C_1 - C_{25} alkoxy, C_2 - C_{25} -

alkoxy interrupted by oxygen, sulfur or $\text{>N}-R_{14}$; C_1 - C_{25} alkylthio, C_3 - C_{25} alkenyl, C_3 - C_{25} -

alkenyloxy, C_3 - C_{25} alkynyl, C_3 - C_{25} alkynyloxy, C_7 - C_9 phenylalkyl, C_7 - C_9 phenylalkoxy, unsubstituted or C_1 - C_4 alkyl-substituted phenyl; unsubstituted or C_1 - C_4 alkyl-substituted phenoxy; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkyl; unsubstituted or C_1 - C_4 -alkyl-substituted C_5 - C_8 cycloalkoxy; C_1 - C_4 alkylamino, di(C_1 - C_4 alkyl)amino, C_1 - C_{25} alkanoyl, C_3 - C_{25} alkanoyl

interrupted by oxygen, sulfur or $\text{>N}-R_{14}$; C_1 - C_{25} alkanoyloxy, C_3 - C_{25} -alkanoyloxy inter-

rupted by oxygen, sulfur or $\text{>N}-R_{14}$; C_1 - C_{25} alkanoylamino, C_3 - C_{25} -alkenoyl, C_3 - C_{25} al-

kenoyl interrupted by oxygen, sulfur or $\text{>N}-R_{14}$; C_3 - C_{25} alkenoyloxy, C_3 - C_{25} alkenoyloxy

interrupted by oxygen, sulfur or $\text{>N}-R_{14}$; C_6 - C_9 cycloalkylcarbonyl, C_6 - C_9 cycloalkylcar-

bonyloxy, benzoyl or C_1 - C_{12} alkyl-substituted benzoyl; benzoyloxy or C_1 - C_{12} alkyl-substituted

benzoyloxy; $\text{—O—}\overset{\overset{R_{18}}{|}}{\underset{\underset{R_{19}}{|}}{C}}\text{—}\overset{\overset{O}{||}}{C}\text{—}R_{15}$ or $\text{—O—}\overset{\overset{R_{20}}{|}}{\underset{\underset{H}{|}}{C}}\text{—}\overset{\overset{R_{21}}{|}}{\underset{\underset{R_{22}}{|}}{C}}\text{—O—}R_{23}$, or else, in formula II, the

radicals R_7 and R_8 or the radicals R_8 and R_{11} , together with the carbon atoms to which they are attached, form a benzo ring,

R_{12} and R_{13} independently of one another are unsubstituted or C_1 - C_4 alkyl-substituted phenylene or naphthylene,

R_{14} is hydrogen or C_1 - C_8 alkyl,

R_{15} is hydroxyl, $\left[-O^- \frac{1}{r} M^{r+} \right]$, C_1 - C_{18} alkoxy or $-N \begin{matrix} R_{24} \\ R_{25} \end{matrix}$,

R_{16} and R_{17} independently of one another are hydrogen, CF_3 , C_1 - C_{12} alkyl or phenyl, or R_{16} and R_{17} , together with the C atom to which they are attached, form an unsubstituted or mono- to tri- C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkylidene ring;

R_{18} and R_{19} independently of one another are hydrogen, C_1 - C_4 alkyl or phenyl,

R_{20} is hydrogen or C_1 - C_4 alkyl,

R_{21} is hydrogen, unsubstituted or C_1 - C_4 alkyl-substituted phenyl; C_1 - C_{25} alkyl, C_2 - C_{25} alkyl

interrupted by oxygen, sulfur or $\text{>N}-R_{14}$; C_7 - C_9 phenylalkyl which is unsubstituted or

substituted on the phenyl radical 1 to 3 times by C_1 - C_4 alkyl; C_7 - C_{25} phenylalkyl which is

interrupted by oxygen, sulfur or $\text{>N}-R_{14}$ and which is unsubstituted or substituted on the

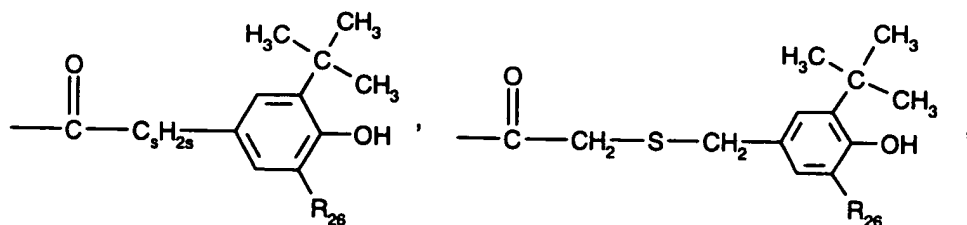
phenyl radical 1 to 3 times by C_1 - C_4 alkyl, or else the radicals R_{20} and R_{21} , together with the carbon atoms to which they are attached, form an unsubstituted or mono- to tri- C_1 - C_4 alkyl-substituted C_5 - C_{12} cycloalkylene ring;

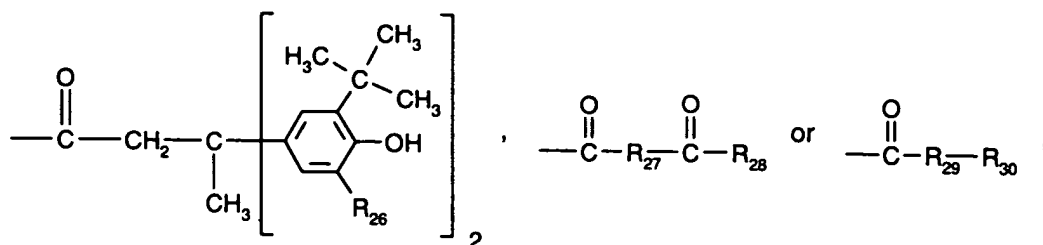
R_{22} is hydrogen or C_1 - C_4 alkyl,

R_{23} is hydrogen, C_1 - C_{25} alkanoyl, C_3 - C_{25} alkenoyl, C_3 - C_{25} alkanoyl interrupted by oxygen, sulfur

or $\text{>N}-R_{14}$; C_2 - C_{25} alkanoyl substituted by a di(C_1 - C_6 alkyl)phosphonate group; C_6 - C_9 cyc-

loalkylcarbonyl, thenoyl, furoyl, benzoyl or C_1 - C_{12} alkyl-substituted benzoyl;





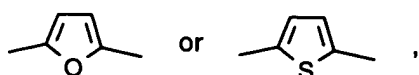
R_{24} and R_{25} independently of one another are hydrogen or C_1 - C_{18} alkyl,

R_{26} is hydrogen or C_1 - C_8 alkyl,

R_{27} is a direct bond, C_1 - C_{18} alkylene, C_2 - C_{18} alkylene interrupted by oxygen, sulfur or



lene, C_7 - C_8 bicycloalkylene, unsubstituted or C_1 - C_4 alkyl-substituted phenylene,



R_{28} is hydroxyl, $\left[-\text{O}^- \frac{1}{r} \text{M}^{r+} \right]$, C_1 - C_{18} alkoxy or $\begin{array}{c} \text{R}_{24} \\ \diagup \\ \text{N} \\ \diagdown \\ \text{R}_{25} \end{array}$,

R_{29} is oxygen, $-\text{NH}-$ or $\begin{array}{c} \text{O} \\ \parallel \\ \text{N}-\text{C}-\text{NH}-\text{R}_{30} \end{array}$,

R_{30} is C_1 - C_{18} alkyl or phenyl,

R_{31} is hydrogen or C_1 - C_{18} alkyl,

M is an r -valent metal cation,

X is a direct bond, oxygen, sulfur or $-\text{NR}_{31}-$,

n is 1 or 2,

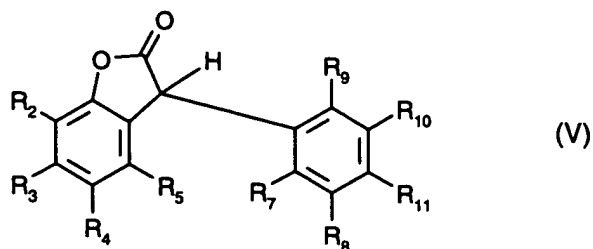
p is 0, 1 or 2,

q is 1, 2, 3, 4, 5 or 6,

r is 1, 2 or 3, and

s is 0, 1 or 2.

3. A powder coating composition according to claim 1, in which component (b) is a compound of the formula V

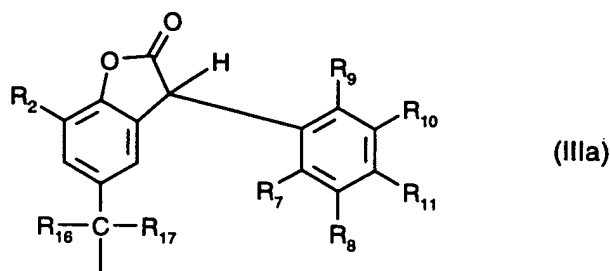


in which

R₂ is hydrogen or C₁-C₆alkyl,

R₃ is hydrogen,

R₄ is hydrogen, C₁-C₆alkyl or a radical of the formula IIIa



R₅ is hydrogen,

R₇, R₈, R₉ and R₁₀ independently of one another are hydrogen, C₁-C₄alkyl or C₁-C₄alkoxy,

R₁₁ is hydrogen, C₁-C₄alkyl or C₁-C₄alkoxy, C₂-C₈alkanoyloxy or $\begin{array}{c} R_{20} \quad R_{21} \\ | \quad | \\ -O-C-C-O-R_{23} \\ | \quad | \\ H \quad R_{22} \end{array}$, with

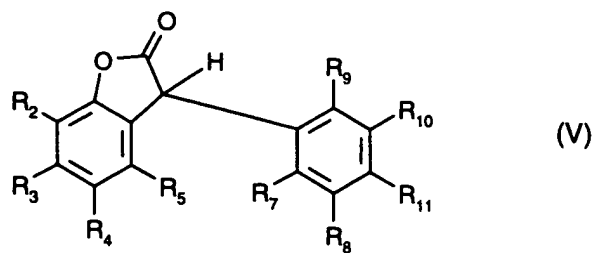
the proviso that at least two of the radicals R₇, R₈, R₉, R₁₀ and R₁₁ are hydrogen;

R₁₆ and R₁₇, together with the C atom to which they are attached, form an unsubstituted or mono- to tri-C₁-C₄alkyl-substituted cyclohexylidene ring,

R₂₀, R₂₁ and R₂₂ are hydrogen, and

R₂₃ is C₂-C₁₈alkanoyl.

4. A powder coating composition according to claim 1, in which component (b) is a compound of the formula V

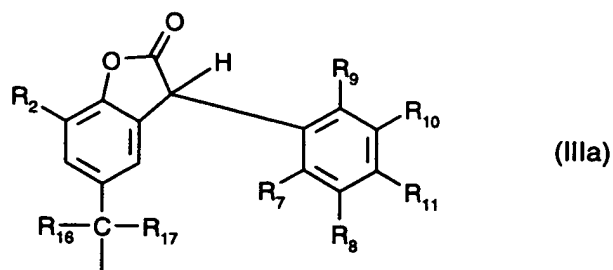


in which

R₂ is tert-butyl,

R₃ is hydrogen,

R₄ tert-butyl or a radical of the formula IIIa



R₅ is hydrogen,

R₇, R₈, R₉ and R₁₀ independently of one another are hydrogen, C₁-C₄alkyl or C₁-C₄alkoxy,

R₁₁ is hydrogen, C₁-C₄alkyl or C₁-C₄alkoxy, C₂-C₈alkanoyloxy or $\begin{array}{c} R_{20} \quad R_{21} \\ | \quad | \\ -O-C-C-O-R_{23} \\ | \quad | \\ H \quad R_{22} \end{array}$, with

the proviso that at least two of the radicals R₇, R₈, R₉, R₁₀ and R₁₁ are hydrogen;

R₁₆ and R₁₇, together with the C atom to which they are attached, form a cyclohexylidene ring,

R₂₀, R₂₁ and R₂₂ are hydrogen, and

R₂₃ is C₂-C₁₈alkanoyl.

5. A powder coating composition according to claim 1, in which component (a) is an epoxy resin, a polyester-hydroxyalkylamide, a polyester-glycoluril, an epoxy-polyester resin, a

polyester-triglycidyl isocyanurate, a hydroxy-functional polyester-blocked polyisocyanate, a hydroxy-functional polyester-uretdione, an acrylat resin with hardener or a mixture of such resins.

6. A powder coating composition according to claim 1, comprising further additives in addition to components (a) and (b).

7. A powder coating composition according to claim 6, comprising as further additives, in addition, one or more components from the group consisting of pigments, dyes, fillers, levelling assistants, devolatilizing agents, charge control agents, optical brighteners, adhesion promoters, antioxidants, light stabilizers, curing catalysts, photoinitiators, wetting auxiliaries or corrosion protection agents.

8. A powder coating composition according to claim 6, comprising as further additives phenolic antioxidants, sterically hindered amines, organic phosphites or phosphonites; and/or thiosynergists.

9. A powder coating composition according to claim 1, in which component (b) is present in an amount of from 0.001 to 10% based on the weight of component (a).

10. A powder coating composition comprising components (a) and (b) according to claim 1 which in the course of curing is in contact with nitrogen oxides originating from combustion gases.

11. A process for reducing the discoloration of heat-curable powder coating compositions, which comprises incorporating into or applying to these compositions at least one component (b) according to claim 1.

12. A process for curing powder coating compositions comprising components (a) and (b) according to claim 1, wherein curing is conducted in a gas oven.

13. A coating film applied and cured by a process according to claim 11 or 12.